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THE
PLOTTER

CLACKAMAS COUNTY AREA T/S
USERS GROUP
NEWSLETTER

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VOLUME 2, NUMBER 3
***
MARCH   1984
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MARCH has blown in on us and maybe a lot of us are thinking that winter is gone and soon we will be able to get out and work in the yard or go on vacation. Let us not forget, when that time comes, about our friendly computers. They can do a lot for us all year long.

MEETING NEWS

Our FEBRUARY meeting was, in our opinion, a fairly prod- uctive one. It was, I am sure you who were there, can attest a much better organised meeting than we have had recently. We think that, with your help, the future meetings can be even better. One of the biggest, if not THE BIGGEST complaint of the last meeting was the noise and distraction caused by the computers that were on and in use DURING the business meet- ing. We are going to ask all of our members, out of common courtesy and for peace of mind, to PLEASE TURN OFF your units for the duration of the main business meeting. I know that more than a few of us will appreciate the gesture. There will be time enough before and after the business portion to see and try new equipment and software.
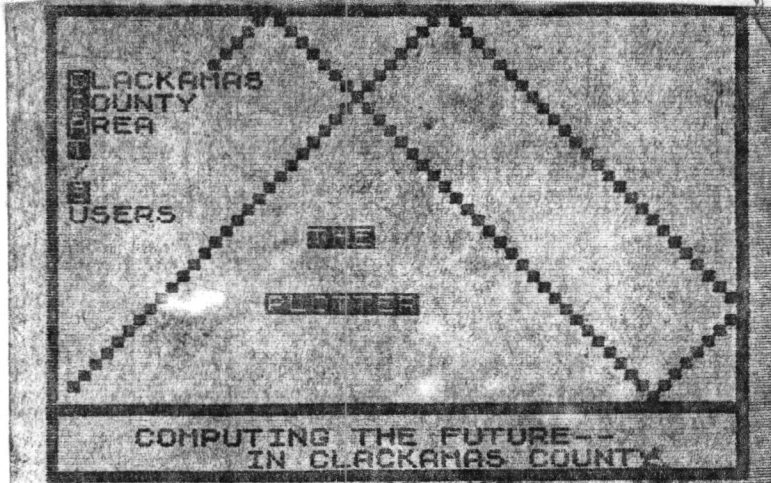
Who knows what good things may be missed by not paying attention to what is being discussed. I did not think that it was boring, did you?

Our next meeting will be held:

    on: FRIDAY, MARCH 9th
    at: 7:00 P.M.
    in: RM 142, CLAIRMONT HALL
        CCC

HOPE TO SEE ALL OF YOU THERE**

The meeting was called to order at 7:30 PM and was adjourned at 8:00 PM. We want to keep the business portion to 30 MINUTES. Some items discussed were: SHOULD WE ALLOW ADVERTISING IN THE NEWSLETTER? (left open till next meeting) SHOULD WE DRAFT A LETTER TO TIMEX REGARDING THE TIMEX REPS? (DENNIS JURRIES will have a report at the MAR. meeting)

Suggestions were presented to the effect that it might be a good idea to start a BULLETIN BOARD in the newsletter. (to be voted on next meeting) We had 23 people at the FEB. meeting. We also signed up 3 new members at the meeting.

BITS and BYTES

We did a bit of detective work this month regarding some new products and a couple of our delinquent magazines.

SYNTAX--now almost two months late with the JAN issue, said that they had lost a couple of editors. They said that the JAN issue was being shipped the 15th of FEB. and that they plan to be caught up by the first week in APRIL.

TIMEX SINCLAIR USER--when we talked to them, we found out that the magazine had been sold by the parent company, ECC, of ENGLAND, sold out to a company called COMPUTER COMMUNICATIONS, INC.. They said that they hope to have all issues caught up by APRIL. Wr hope so, as we miss the magazine.

TSU also said that if anyone who has subscribed amd has received a card telling them that their subscriptions had been extended in place of the PACKRABBIT tape, will get the extension. Anyone who has not received such a card will get a substitute tape in the near future.

TIMEX--says that the CARTRIDGE PLAYER for the T/S 1000-1500 have been shipped, the MODEM is due to be shipped the last two weeks in FEB, and should be to the dealers by mid-MARCH. The telephone operator at TIMEX said that they were not allowed to give out any names when she was asked who was the new head of TIMEX COMPUTER DIVISION. Speaking of telephones, here are some numbers that you may want to keep handy if you wish to call TIMEX:

        1-800-248-4639
        1-203-573-4883
        1-501-372-1111

The first two are in CONN., and the last is in ARKANSAS.

DICK WAGNER tells us that he has installed a REVERSE VIDEO MODULE in a T/S 1000 and will have it at the next meeting. Anyone interested in seeing and trying it, BE THERE>>>

Anyone who plans to make or get copies made of any of the tapes in the library, should try to bring a tape recorder with them, as the ones that are there with computers are often in use. If you bring one, there will be equipment at the meeting which will allow you to dub copies.
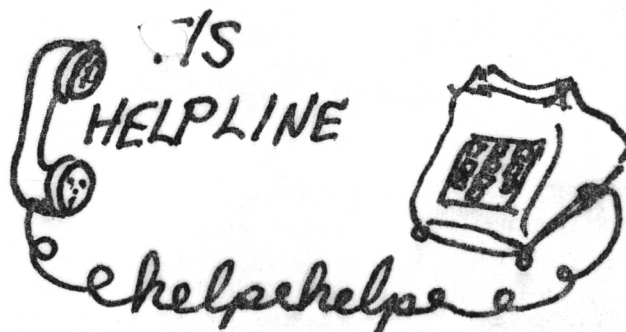

T/S HELPLINE

We hope that this new column was of some help to someone out there last month. This month we want to help newcomers to the T/S COMPUTERS with a couple of problems we have all come across at one time or another. The first is the system crash that can be caused by bad plugs and/or sockets from the power supply. Our suggestion?-wire the power lead directly to the computer board and plug the supply into a switched outlet box. If you have had any trouble with heat build-up, you might also consider a power supply that is fully regulated. Many people who are into computers today have not only not worked with computers, but have not even worked with a tape recorder. Just a couple of often overlooked (especially by real newcomers), items that pertain to the care and treatment of cassette tapes. FIRST, and most importantly, NEVER-EVER store your tapes near any sort of MAGNETIC FIELD. This includes magnets, electric motors, some TV sets (older model tube types in particular), and some older radios. SECONDLY, never store them where they will be exposed to excessive heat. Either of these things can totally destroy your valuable recordings.

If you are in a dusty environment, you may find it to your advantage to store the tapes in a dust-proof container, such as a zip-lock bag or a box (preferably a metal one) to stop both dust and any stray magnetics.

ANY QUESTIONS? JUST ASK. WE WANT TO HELP.
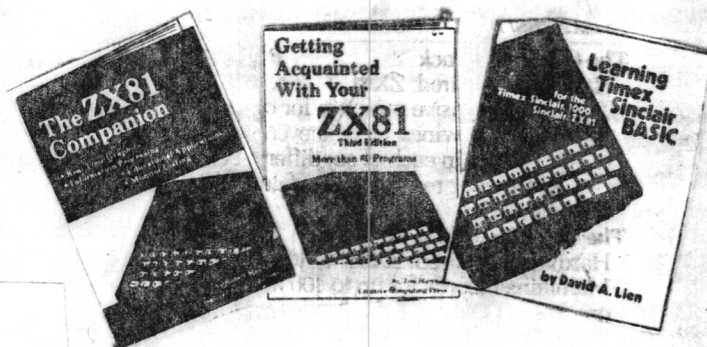
TIMEX SOFTWARE
TIMEX sinclair

EDITORS NOTE: We sure hate to keep repeating the same song each month, BUT the fact is, we still need contributors to the newsletter to help make it more interesting and to broaden the information base that a group like ours was formed to develop. Without contributions we can put out a good newsletter, with your help, we can make it (if not GREAT, at least better) than it is.
We regret that we are not able to continue the promised series on JUSTIFICATION, but we will be continueing it in future issues. Please stay tuned.

CLACKAMAS
COUNTY
AREA
TIMEX
SINCLAIR
USER'S GROUP
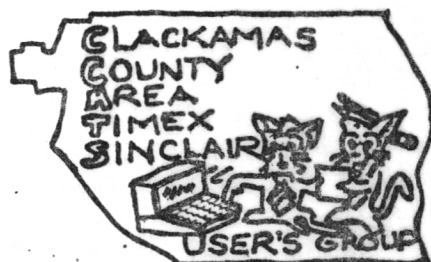
BOOK REVIEW
by

DICK WAGNER

CONTROL THINGS WITH
YOUR TIMEX SINCLAIR
COMPUTER

by

ROBERT L. SWARZ

NOTE: The author is a local writer and computer expert.

This book covers a broad range of projects, programs to operate the devices you can build, sound generation, as well as machine code routines to do many of the jobs faster. Besides actual programs that generate sound on your T/S 1000-1500, he covers keyboard theory, repeat control key, joystick control, power supplies, decoders, output pulses, video inverter/moniter, and a tape recorder amplifier/ level indicator. Thirteen chapters, 180 pages. PRICE: $6.95 from DILITHIUM PRESS, BEAVERTON, OR. Parts used are almost all availible from RADIO SHACK.

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Have you read any good books on T/S computing lately? If so, why not share them with the group? You do not have to be a good writer yourself, just get a rough draft to us and we will do the rest.

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ZX/TS P and R

This month our routine again comes from DICK WAGNER. He thought that some of you may like to know how to use the string slicing capability of your computer. The string that you wish to slice, or print only a portion of, can be made up of characters, words and/or numbers. You can select any group from within the string to be PRINTed. Here is an example:

```
10 LET A$="STRINGS"
```

If you wish to PRINT only the word "IN" from this STRING, then you would use the following line:

```
100 PRINT A$(4 TO 5)
```

Substrings must be a continuous word in order for this to work. For more than consecutive letters, you must add a "+" in between the character sets.

Our ZX/TS program this month comes again from JACK ARMSTRONG and is a short little game.

```
10 REM "COMBAT"
20 LET SCORE=0
30 FOR J=1 TO 20
35 GOSUB 1000
40 PRINT AT 0,0;"ENTER A NUMBE
R FROM 1 TO 10";AT 1,8;"GO NUMBE
R ";J
50 INPUT A
60 IF A<1 OR A>10 THEN GOTO 50
70 PRINT AT 10,0;"YOUR NUMBER
IS ";A;AT 12,6;"SCORE IS ";SCORE
80 FOR G=1 TO 4
90 LET B=INT (RND*10)+1
100 PRINT AT 3,3;B;" "
110 IF B=A THEN GOTO 130
120 NEXT G
130 IF A=B THEN LET SCORE=SCORE
+1
140 IF A=B THEN PRINT AT 14,6;"
WELL DONE"
150 IF A<>B THEN PRINT AT 14,8;
"BAD LUCK"
160 PRINT AT 12,6;"SCORE IS ";S
CORE
170 IF SCORE=5 THEN GOTO 260
180 FOR T=1 TO 20
190 NEXT T
200 CLS
210 NEXT J
220 PRINT "THE GAME IS OVER AND
YOU ONLY"
230 PRINT "SCORED ";SCORE
240 PRINT "YOUR RATING IS ";SCO
RE/.05;" PERCENT"
250 GOTO 290
260 PRINT "YOU DID IT"
270 SCROLL
280 PRINT "YOU WIN"
```

```
290 SCROLL
300 PRINT "ANOTHER TRY? PRESS "
"RUN"" """ENTER"""
310 STOP
1000 LET A$="
```

```
1010 LET B$="
```
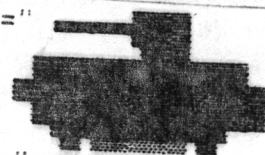
```
1020 PRINT AT 4,2;B$
1030 RETURN
2000 SAVE "COMBAT"
3000 GOTO 10
```

2068 PROGRAM

(REPRINTED FROM THE TIMEX SINCLAIR 2068)

This program draws a BOMB with a burning fuse along with a randomly chosen CHARACTER. To de-fuse the BOMB, you must enter the correct CODE number for that character. If you need more time at first, then increase the value of "t" in LINE 25.
You may also notice that the program makes use of the INKEY$ instead of INPUT. We have talked about the use of this before.

CHR TEST

```
10 BORDER 6: PAPER 7: INK 2:CLS
20 PRINT AT 15,5;"BOMB"
20 CIRCLE 56,52,39
25 LET t=10
30 PLOT 56,91: DRAW 0,5: DRAW
   t,t: PLOT OVER 1;56+t,96+t
35 LET x=INT (RND*223)+33
40 IF x>=144 AND x<=164 THEN
   GO TO 35
45 PRINT AT 0,0;"WHAT IS THE
   CODE FOR:";CHR$ x
50 LET a$="": LET a=0
55 PAUSE 10: LET i$=INKEY$
60 GO SUB 500
65 IF t=0 THEN GO TO 950
70 IF i$=CHR$ 13 THEN GO TO 100
75 IF i$<"0" OR i$>"9" THEN
   GO TO 55
80 LET a$=a$+i$: LET a=VAL a$:
   PRINT AT 2,22;A$: GO TO 55
100 IF a=x THEN GO TO 900
105 PRINT AT 2,22; OVER 1;a$:
   GO TO 50
```

```
 500 DRAW OVER 1;-1,-1
 510 LET t=t-1: RETURN
 900 PRINT AT 5 11; FLASH 1;
     "WELL DONE. ": GO TO 1000
 950 FOR k=1 TO 2: FOR j=0 TO 7:
     PAPER j: BORDER j:CLS:BEEP
     .01,k*7-j: NEXT j: NEXT k:
     BORDER 6
1000 PRINT "THE CODE FOR ";
     CHR$ x;" IS: ";x
1010 PRINT AT 21,0;"PRESS ""R""
     TO RE-RUN"
1020 IF INKEY$="r" OR INKEY$=
     "R" THEN RUN
1030 GO TO 1020
9000 SAVE "CHR TEST" LINE 0
```

ARTICLE

HOW TO CHANGE RAMTOP
PART ONE

by

DICK WAGNER

(NOTE: Part two will be print-
ed next month)

Part one is the blind faith
Part of this article, Part two
will be a discusson on the
background used for Part one.

certain Programs call for RAM-
TOP to be lowered, sometimes
by a certain number of bytes. I
recently ran into this Problem,
so I decided that it was some-
thing that I had to know more
about.

With 16K of memory, our comp-
Puters have a RAMTOP address of
32767. Computers with 2K of
memory have an address of 18432
for RAMTOP. The 1K RAM in the
ZX81 has a RAMTOP address of
17408.

The following direct command
will ask the computer for the
RAMTOP address in your computer:

PRINT PEEK 16388+256*PEEK 16389

The easiest method to lower RAM-
TOP is based on using increments
of 256 to determine the amount
of memory to leave above RAMTOP.
Consider that 4*256=1024=1K and
256=1/4K. With this method 2
numbers must be POKEd. as in:

POKE 16388,0 (0=increments of
                256)
POKE 16389,N (N=128 for an add-
                ress of 32767)

Where N is number based on this
table:

K	N	DIFF. FROM 128
1/4	127	1
1/2	126	2
1	124	4
2	120	8
4	112	16
8	96	32
16	64	64

Select the number N determined
by this table of values, where
K is the amount to lower RAMTOP.

I suggest that you copy this
table on a card along with the
following example on a card for
future reference, or Put a copy
in your computer notebook.

EXAMPLE:

    Lower RAMTOP 2500 or 2 1/2K

    2K = 8
    1/2K= 2

        10

      N=128-10=118
 or   N=120(2K)-2(1/2K)=118

Now: POKE 16388,0
     ENTER
     POKE 16389,118
     ENTER
     NEW
     ENTER

Blind faith now says that RAM-
TOP= 32768-2 1/2*1024=30208.
If you question faith then check
your work with:

PRINT PEEK 16388+256*PEEK 16389

NOTE: While POKE will accept
either the 16388,0 first, or the
16389,118 first, the PEEKs MUST
be in the order shown.

  TILL NEXT TIME--
     KEEP ON
  PEEKing and POKEing>>>*
```

CCAT/S
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OREGON CITY,   OR 97045